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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,096	02/27/2004	Alain Rivard	101783-5	4817
27220 7590 07/05/2007 BLAKE, CASSELS & GRAYDON, LLP 45 O'CONNOR ST., 20TH FLOOR OTTAWA, ON K1P 1A4 CANADA			EXAMINER HAILU, KIBROM T	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 07/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/787,096

Applicant(s)

RIVARD ET AL.

Examiner

Kibrom T. Hailu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because multi-point-to-multi-point connection is not what is disclosed and/or doesn't explicitly direct to the claimed and disclosed invention. Correction is required. See MPEP § 608.01(b).
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-15 are not statutory because the applicant claims message structures providing a communication protocol. The applicant further claimed different kinds of header structures, which include command codes, fields and identifies without any instructional execution and/or physical transformation. The examiner was read the claims in light of the specification to see whether the claimed invention is statutory or not. The specification doesn't provide any explanation of instructional execution and/or transformation. The claimed invention must produce a useful, concrete, and tangible result to be statutory. [See MPEP 2106.01].

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 3, 4, 5, 7, 10 and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by St. Pierre (US 6,853,841 B1).

Regarding claim 1, St. Pierre discloses a message structure providing a communications protocol for use over a high speed network to control a video source (Abstract), the message structure having a message header (header 74, 90, 126, 166) selected from one of: (i) a command header (74, 90, 126); (ii) a data header (74, 166); and (iii) an answer header (74, 138, 178) (Fig. 5; 6B; 7B; 8B; col. 8, lines 56-61; col. 9, lines 26-28, 58-60; col. 10, lines 30-32).

Regarding claim 2, St. Pierre further discloses including a selected message header that is an interrupt header (message header 74) (Fig. 5; col. 8, lines 56-61).

Regarding claim 3, St. Pierre discloses the video source being controlled provides image data (col. 11, lines 14-20).

Regarding claim 4, St. Pierre discloses a message having a command header further includes data fields defining: (i) a command code (operational code or opcode 78, 94, 130); (ii) request ID (session ID field 80, 96, 132); (iii) a message length (the length of text string field 154); (iv) a command address (URL address); and (v) command data (message body 134) (Fig. 7B; col. 9, 29-34, line 61-col. 10, line 7; col. 4, lines 35-38, 44-47, 62-65).

Regarding claim 5, St. Pierre further discloses the message structure including a data field defining a version (Fig. 7A, protocol version number 128).

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Regarding claim 7, St. Pierre discloses the data field defining the command code provides a unique code corresponding to an action command (Fig. 7A; 8A; col. 9, lines 46-53; col. 10, lines 13-21).

Regarding claim 10, St. Pierre discloses a message having a data header further includes data fields defining: a packet ID; and a data ID (col. 11, lines 24-29, 40-41, "type of image 262". Note also that sequential packet identifier, which incrementing with every packet sent is obvious and well known in the art).

Regarding claim 14, St. Pierre discloses a format code whereby different types of data can be uniquely identified (col. 11, lines 24-29, 40-41).

Regarding claim 15, St. Pierre discloses an identifier number (Fig. 5, "session ID 80").

7. Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by Gubbi et al. (US 7,093,015 B2).

Regarding claim 16, Gubbi discloses a method for communicating over a network comprising: providing a source of image packets, each such packet including an identifier number (col. 17, lines 5-7); and providing a receiver of image packets to process a series of image packets (Fig. 4; col. 8, lines 49-54); and tracking the receiving image package identifier number (col. 22, lines 32-37); producing re-send image packet request for packets not successfully received (col. 21, lines 27-31).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. Pierre in view of Buchholz et al. (US 5,440,545).

Regarding claim 6, St. Pierre discloses the data field defining the command code (Fig. 5; col. 8, lines 64-66, “1 byte Operation Code (opcode) field 78 set to the number representing the operation currently being performed). However, St. Pierre doesn’t explicitly disclose the opcode field 78 provides unique codes corresponding to a register read command, a register write command, a configuration read command, and a configuration write command.

Buchholz teaches the header 420 includes virtual circuit identifier (ID) field 510 (same as command code). The virtual ckt ID 510 in turn points to a register read command, a register write command, a configuration read command, and a configuration write command (Fig. 4 and 5; col. 6, lines 16-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a header with command code that includes unique codes or identifiers for pointing or configuring and register reads and writes command as taught by Buchholz into the network protocol message of St. Pierre thereby forming a chain or link of

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addresses for defining which buffer location the message data portion of a received transmission packet not requiring reassembly will be stored (Buchholz, col. 6, lines 31-34).

Regarding claim 12, St. Pierre discloses a network node receiving a message containing a command header produces a response message containing an answer header (Fig. 7A; 7B; col. 9, lines 53-57 and 65-66, “response header 138”).

11. Claims 8-9 and 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. Pierre in view of Gubbi.

Regarding claim 8 and 9, St. Pierre discloses the command code data field provides unique codes corresponding to a get device info action command; a trigger action command (Fig. 6A; 7A; col. 9, lines 12-25; col. 10, lines 13-21). St. Pierre doesn't explicitly disclose re-send packet action command, and the command code data field further provides a unique code corresponding to a module reset action command.

Gubbi, in the same field of endeavor, teaches re-send packet action command (col. 21, lines 27-31), and the command code data field further provides a unique code corresponding to a module reset action command (col. 21, lines 7-10, “reset client”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the key frame request that is sent or is originated at the receiving side of the video transmission for retransmission when there is a frame loss at the receiving end, and the reset client requests the receiving client 16 to reset itself and start afresh from the connection request stage as taught by Gubbi into the network protocol message of St. Pierre in order to achieve efficient transmission of data.

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Regarding claim 11, as applied above, St. Pierre discloses a message having a data header has unique value tags for a regular message data types (col. 11, lines 24-29, 40-41, "type of image 262'). St. Pierre doesn't explicitly disclose the value tag for a re-send message data types.

Gubbi teaches the value tag for a re-send message data types (col. 10, lines 4-5; col. 17, lines 5-7, 16-21 in combination with col. 21, line 30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the information or identifier or value tag for type of packets (ordinary and/or retransmit) as taught by Gubbi into the network protocol message of St. Pierre so that the receiving side would be able to determine the origin of the packet and perform appropriate actions to the packets, including giving priority to the packets that contain messages of great importance.

Regarding claim 13, St. Pierre discloses a message having a data header further includes the data fields defining: (i) data length (status length field 190) (col. 10, line 40). However, St. Pierre doesn't explicitly disclose (ii) a time stamp; and (iii) resent image.

Gubbi teaches (ii) a time stamp (Fig. 12, "time stamp 148"); and (iii) resent image (col. 21, lines 30-31, "retransmit frame").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the data header structure of Gubbi that includes data fields defining a time stamp and retransmit image frame into the network protocol message of St. Pierre so that the transmitting and receiving sides may synchronize their respective time counters using the

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time stamp 148 provided in an incoming packets, thus achieve efficient transmission and/or retransmission.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kibrom T. Hailu whose telephone number is (571)270-1209. The examiner can normally be reached on Monday-Thursday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kibrom Hailu

KTH

06/29/07


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER